AMENDMENTS TO THE CLAIMS

Claims 2, 5, 47, 49, 51, 53 and 55 are hereby cancelled. Claims 1, 48, 50, 52, 54 and 56 are amended.

This listing of claims will replace all prior versions, and listings, of claims in the application:

Complete Listing of Claims:

Claim 1 (amended): An antimicrobial composition <u>concentrate</u>, comprising:

pyrithione or a pyrithione complex; and

a zinc or copper or silver source selected from the group consisting of zinc or copper or silver salts, zinc or copper or silver oxides, zinc or copper or silver hydroxides, zinc or copper or silver metals, and combinations thereof;

wherein the weight ratio of said zinc or copper or silver source to said pyrithione or said pyrithione complex is in the range from <u>1:300 to 50:1</u> ~~1:100 to 1:10~~, and wherein said antimicrobial composition has an enhanced biocidal effect against microorganisms selected from the group consisting of free-living microorganisms, parasitic microorganisms, adherent microorganisms, biofilms, and combinations thereof~~, said antimicrobial compositions being free of thiazolinone and free of a strong chelating agent.~~ <u>upon dilution of the concentrate in a working fluid of at a dilution rate of between about 1:10 and about 1:100.</u>

Claim 2 (original): The antimicrobial composition of claim 1, wherein said pyrithione complex is selected from the group consisting of pyrithione salts and pyrithione adducts.

Claim 3 (cancelled)

Claim 4 (withdrawn)

Claim 5 (cancelled)

Claim 6 (withdrawn)

Claim 7 (withdrawn)

Claim 8 (original): The antimicrobial composition of claim 1, wherein said zinc or copper or silver complex comprises zinc or copper or silver in combination with a complexing agent.

Claim 9 (previously amended): The antimicrobial composition of claim 8, wherein said complexing agent is selected from the group consisting of zeolites, titania, carbon, azoles, ethylenediaminetetraacetic acid, ethylene-bis-(oxyethylenenitrilo)-tetra-acetic acid, crown ethers, cryptates, cyclodextrin, and combinations thereof.

Claim 10 (original): The antimicrobial composition of claim 1, wherein said zinc or copper or silver source is generated electrolytically.

Claim 11 (previously amended): The antimicrobial composition of claim 1, wherein said weight ratio of said zinc or copper or silver source to said pyrithione or said pyrithione complex is in the range of from about 1:100 to about 1:10.

Claims 12-32 (withdrawn)

Claim 33 (previously amended): An antimicrobial composition concentrate useful upon dilution for treating microorganisms selected from the group consisting of free-living microorganisms, parasitic microorganisms, adherent microorganisms, biofilms, and combinations thereof, comprising:

a salt of pyrithione; and

a water soluble zinc metal salt;

wherein the weight ratio of said water-soluble zinc metal salt to said salt of pyrithione is in the range from 1:100 to 1:10 and wherein said antimicrobial composition has an enhanced biocidal effect against microorganisms selected from the group consisting of free-living microorganisms, parasitic microorganisms, adherent microorganisms, biofilms, and combinations thereof, upon dilution in a working fluid at a dilution ratio of the concentrate to the working fluid of between about 1:10 and about 1:100.

Claim 34 (previously amended): The antimicrobial composition concentrate of claim 33, wherein said salt of

pyrithione is sodium pyrithione and said zinc metal salt is selected from the group

consisting of zinc chloride, zinc oxide, zinc sulfate, and combinations thereof.

Claims 35-42 (withdrawn)

Claim 43 (previously amended): An antimicrobial composition concentrate, comprising:

pyrithione or a pyrithione complex; and

zinc from a zinc source selected from the group consisting of zinc salts, zinc oxides, zinc hydroxides, and combinations thereof;

wherein the weight ratio of said zinc source to said pyrithione or said pyrithione complex is in the range from 50:1 to 1:50, and wherein said antimicrobial composition has an enhanced biocidal effect against microorganisms selected from the group consisting of bacteria, fungi, and combinations thereof, upon dilution of the concentrate in a working fluid at a dilution rate of between about 1:10 and about 1:100.

Claim 44 (previously amended): An antimicrobial composition, comprising:

pyrithione or a pyrithione complex; and

silver source selected from the group consisting of silver salts, silver oxides, silver hydroxides, silver metals, silver complexes, and combinations thereof;

wherein the weight ratio of said silver source to said pyrithione or said pyrithione complex is in the range from about 1:100 to about 1:10, and wherein said antimicrobial composition has an enhanced biocidal effect against microorganisms selected from the group consisting of free-living microorganisms, parasitic microorganisms, adherent microorganisms, biofilms, and combinations thereof.

Claim 45 (previously amended): An antimicrobial composition, comprising:

pyrithione or a pyrithione complex; and

a zinc source selected from the group consisting of zinc salts, zinc oxides, zinc hydroxides, and combinations thereof;

wherein the weight ratio of said zinc source to said pyrithione or said pyrithione complex is present in a ratio from 1:100 to 1:10, said antimicrobial compositions being free of thiazolinone and free of a strong chelating agent.

Claim 46 (previously added): The antimicrobial composition of claim 45 wherein said

weight ratio is from 1:100 to 1:10.

Claim 47 (cancelled)

Claim 48 (amended): The antimicrobial composition of ~~claim 47~~ claim 1 which additionally comprises water or an organic solvent, wherein said organic solvent is an alkanolamine.

Claim 49 (cancelled)

Claim 50 (amended): An antimicrobial composition concentrate useful upon dilution for treating microorganisms selected from the group consisting of free-living microorganisms, parasitic microorganisms, adherent microorganisms, biofilms, and combinations thereof, comprising:

a salt of pyrithione; and

a water soluble zinc metal salt;

wherein the weight ratio of said water-soluble zinc metal salt to said salt of pyrithione is in the range from 50:1 to 1:50 and wherein said antimicrobial composition has an enhanced biocidal effect against microorganisms selected from the group consisting of free-living microorganisms, parasitic microorganisms, adherent microorganisms, biofilms, and combinations thereof, upon dilution in a working fluid at a dilution ratio of the concentrate to the working fluid of between about 1:10 and about 1:100,

said antimicrobial composition additionally comprises water or an organic solvent, ~~The antimicrobial composition of claim 49~~ wherein said organic solvent is an alkanolamine.

Claim 51 (cancelled)

Claim 52 (amended): An antimicrobial composition concentrate, comprising:

pyrithione or a pyrithione complex; and

zinc from a zinc source selected from the group consisting of zinc salts, zinc oxides, zinc hydroxides, and combinations thereof;

wherein the weight ratio of said zinc source to said pyrithione or said pyrithione complex is in the range from 50:1 to 1:50, and wherein said antimicrobial

composition has an enhanced biocidal effect against microorganisms selected from the group consisting of bacteria, fungi, and combinations thereof, upon dilution of the concentrate in a working fluid at a dilution rate of between about 1:10 and about 1:100,

said antimicrobial composition additionally comprises water or an organic solvent,

~~The antimicrobial composition of claim 51~~ wherein said organic solvent is an alkanolamine.

Claim 53 (cancelled)

Claim 54 (amended): An antimicrobial composition, comprising:

pyrithione or a pyrithione complex; and

silver source selected from the group consisting of silver salts, silver oxides, silver hydroxides, silver metals, silver complexes, and combinations thereof;

wherein the weight ratio of said silver source to said pyrithione or said pyrithione complex is in the range from about 1:100 to about 1:10, and wherein said antimicrobial composition has an enhanced biocidal effect against microorganisms selected from the group consisting of free-living microorganisms, parasitic microorganisms, adherent microorganisms, biofilms, and combinations thereof

the antimicrobial composition concentrate additionally comprises water or an organic solvent, ~~The antimicrobial composition of claim 53~~ wherein said organic solvent is an alkanolamine.

Claim 55 (cancelled)

Claim 56 (amended): An antimicrobial composition, comprising:

pyrithione or a pyrithione complex; and

a zinc source selected from the group consisting of zinc salts, zinc oxides, zinc hydroxides, and combinations thereof;

wherein the weight ratio of said zinc source to said pyrithione or said pyrithione complex is present in a ratio from 1:100 to 1:10, said antimicrobial compositions being free of thiazolinone and free of a strong chelating agent,

said antimicrobial composition additionally comprises water or an organic solvent,

~~The antimicrobial composition of claim 55~~ wherein said organic solvent is an alkanolamine.

Claim 57 (previously added): The antimicrobial composition of claim 1 wherein said zinc or copper or silver salts is selected from the group consisting of zinc or copper or silver sulfates, zinc or copper or silver chlorides, and combinations thereof.

Claim 58 (previously added): The antimicrobial composition of claim 44 wherein said zinc or copper or silver salts is selected from the group consisting of zinc or copper or silver sulfates, zinc or copper or silver chlorides, and combinations thereof.